

# Arizona Transportation Research Center

Newsletter — October 2002

# Project Updates

Highlights from selected projects

# STATE PLANNING AND RESEARCH (SPR) PROJECTS

# SPR 396 – LTPP and Other Test Section Management and Evaluation

This project has consolidated efforts previously underway under SPR 388, 390, 391, 393, and 395. The objective of this project is to ensure the maintenance and evaluation of the ongoing Long Term Pavement Performance (LTPP) test sections.

# SPR 473 - Intelligent Vehicle Initiative Research

This project is intended to conduct Intelligent Vehicle research related to snowplow research. The current focus of this research is to consider two different technologies, infrared and radar, as possible research directions.

# SPR 474 - Develop Statewide GIS-Based Feature Inventory System

This project is intended to update the ADOT features inventory database, using and geographic information system (GIS) capability. Meetings were held with Statewide Resident Engineers to review this project.

#### SPR 493 - Bridge Foundation Design Parameters, SGC Bearing Materials

This study is being performed by the Arizona State University Construction Department. It is investigating the drill shaft design in bridge substructure. Indications are that ADOT may achieve a savings of \$200,000 per bridge by the revision of design parameters developed from this project.

# SPR 519 – PM-10 Research for Dust Mitigation

The purpose of this research is to identify, evaluate, and develop educational tools and outreach programs for dust mitigation to address federal, state, and local particulate emission requirements. The Technical Advisory Committee for this project includes representatives from ADOT, Arizona State University, Maricopa County, City of Mesa, Federal Highway Administration, and the construction industry.

#### SPR 545 - Roundabout Evaluation

The Arizona Department of Transportation has installed two traffic circles, or roundabouts, at the Interstate 17 traffic interchange at Happy Valley Road in Phoenix. This study is aimed at evaluating the design and effectiveness of the roundabout feature from the driver's perspective. The consultant has begun collecting data on this project using mail surveys to targeted individuals.

# SPR 534 – Developing an Electronic "Signature" Process for ADOT

This study is designed to prepare a comprehensive study of all the areas within ADOT that digital signatures would help it do business electronically. It will then propose a technical architecture along with plans for a pilot implementation. The study is now in the pilot testing phase.

# **ATRC UPDATE**

The Arizona Transportation Research Center completed a peer exchange in June 2002. The Peer Exchange Team included participants from the Texas Transportation Institute, Virginia Department of Transportation, Washington State Department of Transportation, Northern Arizona University and ADOT. Results of the peer exchange have been shared with the ADOT Research Council and Steering Committee.

The October 2002 issue of the Transportation Research Digest passed an impressive milestone – the 2,000th summary was published. The Digest has been a highly esteemed output of the Arizona Department of Transportation since it began in 1984 as the Document Review.

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